REMARKS

Summary Of Thes Office Action & Formalities

Status of Claims

Claims 1-19 are all the claims pending in the application. Claims 7-12 are withdrawn from further consideration by the Examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention. By this Amendment, Applicant is amending claims 1, 5, 6, 14, 15 and 18, canceling claim 13, and adding new claims 20 and 21. No new matter is added.

Additional Fees

Submitted herewith is a Petition for Extension of Time with fee.

Claim to Foreign Priority

Applicant thanks the Examiner for acknowledging the claim to foreign priority and for confirming that the certified copy of the priority document was received.

Information Disclosure Statement

Applicant also thanks the Examiner for initialing the references listed on form PTO/SB/08 submitted with the Information Disclosure Statement filed on June 16, 2006.

Election of Species

Applicant affirms the election of the invention of Species I, claims 1-6 and 13-19, made without traverse. Applicant reserves the right to prosecute claims 7-12 in a separate divisional application.

Claim Rejections - § 112

Claims 5, 6, 15 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

> Claim 5 recites the limitation "in breathing mode" in the second line of the claim. There is insufficient antecedent basis for this limitation in the claim.
>
> Claim 6 recites the limitation "said PVDF tube" in the first line of the claim. There is insufficient antecedent basis for this limitation in the claim.
>
> Claim 15 recites the limitations "the valve member" and "the actuating rod" in the first line of the claim. There is insufficient antecedent basis for this limitation in the claim.

Office Action at page 3.

Applicant has amended the claims to clarify the subject matter without narrowing their scope to obviate these rejections.

Claim 18 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01.

> The omitted structural cooperative relationships are: the adaptation necessary for a pump to dispense "the fluid such that it is so finely sprayed that the spray is undetectable by the user".

Office Action at pages 3-4.

Applicant has amended claim 18 without narrowing its scope to obviate this rejection.

Art Rejections

1. Claims 1-3 and 13-19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rocci (US 5,676,129) in view of Jones (US 7,168,597).

2. Claims 4-6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rocci and Jones as applied to claims 1 and 2 above, and further in view of Uber (US 6,353,324).

Applicant respectfully traverses.

Claim Rejections - 35 U.S.C. § 103

1. Claims 1-3 And 13-19 Over Rocci (US 5,676,129) In View Of Jones (US 7,168,597).

In rejecting claims 1-3 and 13-19 over Rocci (US 5,676,129) in view of Jones (US 7,168,597), the grounds of rejection state:

> Regarding claims 1-3, 18 and 19, Rocci discloses a fluid dispensing device including a fluid dispensing member in the form of a metering valve (3) and a dispensing head (10) and a dispensing orifice (11) connected by a expulsion channel (7), within the channel is a tube with a dynamic pressure sensing detector (12) (Abstract) (column 5, lines 14-20) (fig. 3) used to send a signal to the user when a dose of fluid has been dispensed (column 3, lines 65-67). Rocci teaches a detector (12) for detecting fluid going from the dispenser to the orifice. Detector (12) users a network of resistors such that when the resistance of one of the resistor is changed due to change in pressure in the transfer channel the voltage will deflect in a positive or negative manner reflecting change. This would appear to be appear to be very similar to a piezoelectric detector. Jones teaches a metering valve with a piezoelectric pressure sensor to detect a user's breath (column 17, lines 44-46; column 18, lines 5-10 and 20-22). Since Jones teaches a piezoelectric pressure sensor to detect changes in pressure this would be an obvious equivalent detector for performing the same function. It would have been obvious to one of ordinary skill in the art at the time of the invention to replace the dispensing detector of Rocci with a piezoelectric detector as taught by Jones as an obvious equivalent alternative means for detecting the presence of fluid.
>
> Regarding claim 13, Rocci discloses the detector (12) being disposed in a sleeve (column 5, lines 14-15) and that one end is co-operating with the dispenser member (3, 4) (fig. 3) and the other end is co-operating with the dispenser head (10) (fig. 3).
>
> Regarding claim 14, Rocci discloses the claimed invention except for the sleeve being made of two parts. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the sleeve out of two parts, since it has been held that constructing a formerly integral structure in various elements involves only routine skill in the art. Nerwin v. Erlichman, 168 USPQ 177, 179.

> Regarding claim 15, Rocci discloses the claimed invention wherein the sleeve is engaged around the dispensing member (3), part of which acts as a valve member to actuate to dispense fluid from the canister (1).
>
> Regarding claim 16, Rocci discloses the detector (12) attached to an electronic means (14) for processing the signals
>
> Regarding claim 17, Rocci discloses the device wherein the detector is adapted to increment or decrement a dose counter (Abstract).

Office Action at pages 4-5.

Claim 1 has been amended to include the subject matter of claim 13.

The grounds of rejection incorrectly characterize Rocci as disclosing a sleeve housing the detector, with the sleeve having one end co-operating with the dispenser member and the other end co-operating with the dispenser head.

In fact, as clearly illustrated in Figs. 1 and 3 of Rocci, the sensor 12 is affixed to the body's wall (being part of the dispenser head), with the tip of the sensing structure flush to the inside wall of the transfer channel 7 of the mouthpiece 2 (also part of the dispenser head); *see also* col. 5, l. 9-12. Definitely no part of the sensor in Rocci, or the tube housing this sensor, is co-operating with the dispenser member (nozzle 4 of valve 3).

Thus, at least the structure of claim 13 (now added to claim 1) is not disclosed in Rocci. Further, no other prior art document discloses such a sensor structure, including Jones.

Accordingly, the Examiner is kindly requested to reconsider and allow claim 1 and claims dependent therefrom.

2. Claims 4-6 Over Rocci And Jones As Applied To Claims 1 And 2 Above, And Further In View Of Uber (US 6,353,324).

In rejecting claims 4-6 over Rocci and Jones as applied to claims 1 and 2 above, and further in view of Uber (US 6,353,324), the grounds of rejection state:

> Regarding claims 4-6, Rocci and Jones teach the claimed device except for the piezoelectric material being polyvinylidene fluoride. Uber teaches an electric circuit with piezoelectric detectors comprising polyvinylidene fluoride (column 1, line 31). It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the device taught by Rocci and Jones with polyvinylidene fluoride for use in a piezoelectric sensor as taught by Uber since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Office Action at page 6.

Without commenting on or agreeing to the grounds of rejection of claims 4-6, these claims are allowable at least by reason of their dependency.

New Claims

For additional claim coverage merited by the scope of the invention, Applicant is adding new claims 20 and 21. Claim 20 is allowable at least by reason of its dependency. Claim 21 is allowable because of the combination of features recited, including a detector disposed in a sleeve connected at one end with the dispenser member and at the other end with the dispenser head.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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